Title (en)
    THERMODYNAMIC SEPARATION

Title (de)
    THERMODYNAMISCHES TRENNVERFAHREN

Title (fr)
    SEPARATION THERMODYNAMIQUE

Publication
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Application
    EP 94928223 A 19940928

Priority
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Abstract (en)
    [origin: WO9510011A1] A process for separation of gases into two components of different boiling points, for example in the separation of ethane from natural gas, comprises a first separation tower (V1) and a second separation tower (V2). Liquid in stream (5) from a bottom of the first tower is expanded and cooled and is then communicated in stream (6) to the second tower at a lower pressure. Gas from the second tower is communicated back to the first tower so that the first component in stream (10) is extracted from the top of the first tower and the second component in stream (11) is extracted from the bottom of the second tower. A third tower (V3) acts as a recycle fractionator upon the gas in stream (7) extracted from the top of the second tower with that gas being compressed into the third tower which is at high pressure. The liquid in stream (5) from the bottom of the first tower is used to cool a condenser (E6) at the top of the first tower (V1) and to cool the material from the recycle fractionator (V3) as it is returned to the top of the first tower.

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